

I Claim:

1. A personal isolation apparatus comprising:
 - a hood for covering a patient's body;
 - a filter device connected to the hood having an exhaust fan secured therein and having a plurality of filters operatively filtering SARS virus and microorganisms as laden in the air streamflow as sucked from the hood by said exhaust fan; and
 - an ultraviolet sterilizer including at least an ultraviolet lamp and formed between the hood and the filter device and operatively killing the SARS virus and microorganisms as laden in the air streamflow as sucked from the hood.
2. A personal isolation apparatus according to Claim 1, wherein said hood includes: a base portion laid on a bed, an inlet port formed in an open front end of the hood adjacent to a patient's chest and waist for entering inlet air into the hood, a rear end plate opposite to the inlet port formed on a rear closed end of the hood adjacent to a patient's head, a connector protruding rearwardly from the hood to be detachably connected with the ultraviolet sterilizer and the filter device, and a rear opening defined within the connector to be fluidically communicated with the UV sterilizer and the filter device.
3. A personal isolation apparatus according to Claim 1, wherein said filter device includes: a duct connected to the hood through the UV sterilizer, a primary filter formed in a front end portion

of the duct secured at a suction port of the duct for preliminarily filtering off the droplet as sprayed from the patient, a secondary filter formed in the duct following the primary filter for further removing microparticles as laden in the inlet air streamflow, and an exhaust fan formed in the duct at a downstream of the secondary filter for sucking an inlet air from the hood through the UV sterilizer and the filters in the duct and for discharging an outlet air through a discharge port formed in a rearmost end of the duct.

4. A personal isolation apparatus according to Claim 3, wherein said primary filter is made of non-woven cloth for filtering the droplets as sprayed from the patient.
5. A personal isolation apparatus according to Claim 3, wherein said secondary filter is a high-efficiency particulate air filter made of non-woven cloth for removing microparticles including SARS virus.
6. A personal isolation apparatus according to Claim 5, wherein said secondary filter includes incorporation of activated carbon and virus-removing agent in the secondary filter.
7. A personal isolation apparatus according to Claim 3, wherein said primary and secondary filters are detachable from the duct of the filter device for a safe and hygienic disposal of the filters when used without causing infection and contamination to the environment.

8. A personal isolation apparatus according to Claim 1, wherein said ultraviolet sterilizer includes: at least one said ultraviolet lamp secured in a lamp cover connected between the hood and the duct of the filter device for irradiation of UV light to the inlet air entering an air passage defined in the sterilizer and to the primary filter, and a reflector formed on a back side of the UV lamp for reflecting UV light as emitted from the UV lamp towards the air passage and towards the primary filter of the filter device.
9. A personal isolation apparatus according to Claim 8, wherein said lamp cover is integrally formed with the duct of the filter device.
10. A personal isolation apparatus according to Claim 1, wherein said hood is connected with an auxiliary cover which is provided to further shield an upper body portion of the patient; said auxiliary cover having a rear portion thereof fastened to an inlet port of the hood and a front portion of the auxiliary cover flexibly and foldably fastened to a patient's chest or waist portion and having a plurality of air inlet openings formed between the auxiliary cover and the patient.
11. A personal isolation apparatus according to Claim 1, wherein said hood is connected with an auxiliary hood which is connected to an inlet port of the hood to cover a lower body portion of the patient to completely shield the patient within the

hood and the auxiliary hood for preventing outward spreading of patient's droplet and virus as sprayed and released from the patient.

12. A personal isolation apparatus according to Claim 11, wherein said auxiliary hood includes a plurality of ventilation holes formed in the auxiliary hood to allow air to enter the auxiliary hood and the hood to be breathed by the patient.